US ERA ARCHIVE DOCUMENT

## FINANCIAL REPONSIBILIY REQUIREMENTS

Plugging and Abandonment Cost Estimates

In accordance with 40 C.F.R. Section 144.52(a)(7) for permitted Class II wells, or section 144.28(d) for rule-authorized wells, in states in which EPA directly implements the UIC Program, the owner or operator is required to establish and maintain financial resources to plug and abandon the injection facility in a manner prescribed by the EPA Regional Administrator. The regulations provide EPA with authority to require a revised estimate of costs and submission of financial responsibility to reflect inflation of relevant costs. The following paragraphs and attached Schedule provide guidelines against which EPA Region 4 will consider the adequacy of financial responsibility proposed by the owner/operator for current financial responsibility.

For purposes of establishing the amount of funds necessary to properly plug and abandon an injection facility, the wells are divided into five (5) depth categories depending on whether or not the primary protective string of casing is cement to surface. Costs developed for each category were determined by breaking operational charges into five (5) phases as follows:

- (1) Rig/Pulling Unit includes hourly rate and associated labor costs.
- (2) Cement Services includes pumping unit, tank truck, and cement costs.
- (3) Site Preparation includes backhoe costs for digging and filling pit, dozer costs for grade work, pit liner, and restoration charges.
- (4) Transportation includes tractor-trailer rtes for deliver of tubing/work string to the rig.
- (5) Miscellaneous applies primarily to wells with casing not cement to surface and includes wire line services, tool rental, bridge plug costs, hydraulic jack costs, etc.

All unit rates and estimated time charges were developed from plugging and abandonment estimates submitted to EPA from operators, job tickets and summaries from plugging and abandonment operations performed by operators to meet UIC requirements, and wells plugged and abandoned by EPA.

The total costs as presented on the attached Schedule are based on the premise that in the event a well must be plugged using financial responsibility, the Trustee would be required, as directed by EPA, to obtain an independent contractor charged with performing all phases of the plugging operation, including subcontracting for services as needed. These costs may from time to time be subject to revision as determined by EPA.

## PLUGGING AND ABANDONMENT COST SCHEDULE

Cement Top Behind Casing\*\*

Well Depth* <500'	At surface \$2300.00	Below Surface \$3000.00
501' – 1000'	\$3000.00	\$3900.00
1001' – 1500'	\$3700.00	\$5000.00
1501' – 2000'	\$4800.00	\$6500.00
>2000'	\$5800.00	\$7400.00

<sup>\*</sup> Refers to PBTD (Plugged back total depth)

<sup>\*\*</sup> Primary protective string of casing